

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

thickened opposite the pedicel, which is variously inserted, mostly laterally, often in line with the septum, and globosely inflated next the spores and about the same length, strongly verrucosereticulate, 30-44 x 22-37µ; dark reddish brown. On Echinopteris Lappula Juss., Guadalajara, Mexico, No. 5036 Sept. 25, 1903. Tehuacan, Puebla, Mexico, No. 5338, Nov. 7, 1903. Collected by the writer.

Closely allied to Puccinia insueta Wint., from which it varies in its entirely different uredospores and the much stronger reticulations of the teleutospores.

PUCCINIA RUBRICANS Holway n. sp.

Spots crimson, mostly circular, from 1-6 mm. in diameter, most leaves having a few large spots and numerous scattered small ones. Sori amphigenous, mostly hypophyllous, solitary, scattered, or circinate on the larger spots.

II. Uredosori light brown; uredospores pale brown, globose, rarely ovate, strongly echinulate, spines 3-4µ apart, wall thick,

4-6 μ , 36-44 x 32-36 μ . III. Teleutosori following in the uredosori, black, teleutospores elliptical, ferruginous, strongly verrucose, 60-68 x 40-44 μ , apex shortly acute, or rounded, slightly thickened, pedicel hyaline, up to 80µ long.

Collected by the writer on Heteropteris Portillana Wats.,

Guadalajara, Mex., Sept. 28, 1903, No. 5063.

Heliotype plates, from photomicrographs, will be distributed with the separates.

Minneapolis, Minn., May 20, 1903.

NOTES ON FUNGI. I. NEW OR INTERESTING AMER-ICAN UREDINEÆ.

BY P. L. RICKER.

AECIDIUM WILLIAMSI Ricker sp. nov.—Spots yellowish, somewhat thickened; peridia densely clustered, mostly hypophyllous, cylindrical or elliptical; spores pale yellow, subglobose, 19-26 μ , minutely verrucose; wall medium, 2 μ .

On leaves and stems of Lithospermum angustifolium Mx., Brookings, S. D., T. A. Williams, June 22, 1893. Specimens are also in the herbaria of the U. S. National Museum and Dr. I. C. Arthur.

This species is not related to Puccinia lithospermi E. & K., originally described on Lithospermum canescens; but which proves to be Evolvulus pilosus Nutt., the Aecidium of which is as yet undescribed, but which the author has recently had the opportunity of examining in the herbarium of Mr. M. A. Carleton of this Department.

Puccinia arundinariae Schw.— This rare species which was reported by Dr. J. C. Arthur in a recent paper¹ as ranging from North Carolina to Alabama, was recently collected at Votaw, Hardin Co., Tex., March 8, 1904, on leaves of Arundinaria (probably A. macrosperma) by Mr. E. R. Hodson of the Bureau of Forestry.

Puccinia Burnetti Griff.— This species was recently discovered in the U. S. National Herbarium on leaves of Eriocoma cuspidata Nutt., collected by Sereno Watson (No. 1292) Monitor Valley, Nevada, July 1868.

Puccinia crandallii Pamm. & Hume.— Specimens of this species have recently been examined on Festuca kingii in the U. S. National Herbarium from Lima, Mont., on No. 313 C. L. Shear, June 30, 1895; Stein Mts., Oreg., on No. 2445 J. B. Leiberg, July 2, 1896; Sunset, Col., G. W. Letterman, July 1886; Sweetwater Co., Wyo., on No. 3300 Aven Nelson, July, 1897.

Puccinia cynodontis Desm.— On leaves of Cynodon dactylon, Lake City, Fla., Ricker and Hume, July 29, 1902. A small amount of uredosporic material was collected near Mr. Hume's house, it being the first time that a Rust has been reported from this country on this host. The early descriptions and that in Saccardo's Sylloge Fungorum are rather incomplete but agree with the specimen as far as they go. The characters drawn from this collection are as follows:

Uredosori hypophyllous, prominent, rupturing the epidermis in linear rows, the epidermis remaining, early naked, pale; uredospores ovoid or globose, 19-26 μ in diameter, minutely verrucose, pores several, scattered, wall medium thick.

Puccinia deformata B. & C.— On glumes and pedicels of Olyra latifolia L., near Mayaguez, Porto Rico, A. A. Heller, Jan. 30, 1890. This seems to be a very rare species. It was originally collected by Wright in Cuba, and the description was rather brief. Our specimen shows the following characters:

Teleutosori forming conspicuous often irregular ferruginous bunches which are often confluent; teleutospores elliptical oblong, only very slightly constricted, 19-26 x 28-40 μ , obtuse at the ends, apex slightly or not at all thickened, wall thick, golden brown; pedicel hyaline, slender, flexous, often attached somewhat laterally, up to twice the length of the spore.

I am indebted to Dr. W. G. Farlow for comparing the specimen with the duplicate type in the Cryptogamic Herbarium of Harvard University.

Puccinia Haleniae Arth. & Holway.— On Gentiana calycosa Griseb., Teton Mts., above Leighs Lake, Wyo., No. 1109 Merrill & Wilcox, July 26, 1901. The material agrees in every re-

¹Bot. Gaz. 34:19, 1902.

spect with the description and this is the first collection known on this host.

Puccinia obscura Schreet.— A species not before observed by the author was collected on Juncoides comosum (E. Mey.) Sheld., at Ukiah, Oreg., by Mr. M. A. Crosby, Aug. 21, 1903.

> U. S. Bureau of Plant Industry. Department of Agriculture.

NEW SPECIES OF FUNGI FROM VARIOUS LOCALITIES.

BY J. B. ELLIS AND B. M. EVERHART.

Dendrodochium sepultum E. & E.—On dead limbs of Ulmus pubescens. Natoma, Kansas, Jan. 8. 1904. (E. Bartholomew, 3139).

Sporodochia densely gregarious, orange-red, single or several smaller ones subconfluent, at first entirely covered by the epidermis which is raised into flattish pustules 1-2 mm. diam., soon ruptured, but still closely adherent, until the upper part entirely disappears, exposing the concave, pezizoid sporodochium. Sporules oblong, continuous, rounded at the ends, 10-15 x 5-6 µ, hyaline or with a slightly yellowish tinge, terminal on fasciculate, thread-like basidia, 30-70 µ long, simple or furcately branched.

Nos. 2831 and 2899 (Bartholomew) on Morus alba are the

same as this.

This may be the conidial stage of Peziza cruenta Schw.

SPHÆROPSIS GRANDINEA E. & E. — On twigs of Maple. Riverside, Ill. March 1903. (E. T. & S. A. Harper, 796).

Perithecia minute, (4-3 mm.) thickly scattered, raising

the bark into minute pustules but hardly rupturing it. Sporules elliptical or subovate, 15-20 x 8-10 μ, on stout basidia as long as the sporules or a little longer.

Sphæropsis clintonii Pk. is on decorticated wood and has sporules oblong-elliptical and a little shorter. S. acerina E. & B. (according to our specm.) is a Haplosporella,—perithecia in a cortical stroma, 2-6 in a stroma, sporules oblong.

HARKNESSIA (?) TETRACERAE E. & E.— On leaves of Tetracera volubilis. Nicaraugua, 1903. (C. F. Baker, 3992.)

Amphigenous, apparently superficial, consisting of scattered, subhemispherical heaps of conidia which are ovate or elliptical, 12-15 x 6-7 μ, hyaline at first, then brown with a light colored streak across the middle. The heaps of conidia are black and 1-13 mm. in diameter.

No perithecium was seen nor any cavity in the substance of the leaf from which the conidia were discharged, and in this respect the fungus does not agree with the generic character of either Harknessia or Melanconium.